

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 April 2001 (05.04.2001)

PCT

(10) International Publication Number
WO 01/23848 A1

(51) International Patent Classification⁷:**G01J 3/28**

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(21) International Application Number:

PCT/FI00/00824

(22) International Filing Date:

27 September 2000 (27.09.2000)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

19992092 29 September 1999 (29.09.1999) FI

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(81) Designated States (national): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

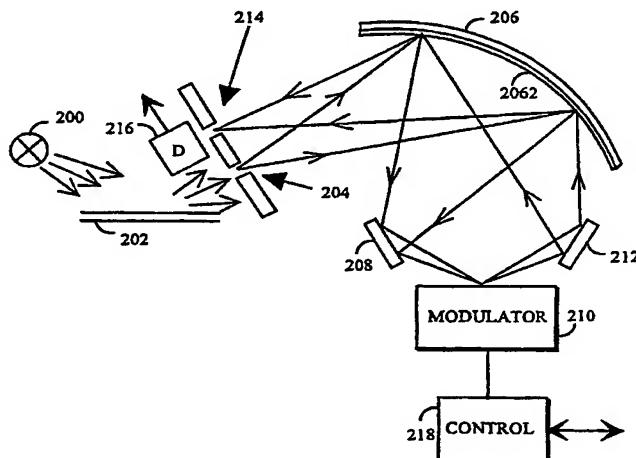
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

— With international search report.

[Continued on next page]

(54) Title: SPECTROMETER AND METHOD FOR MEASURING OPTICAL SPECTRUM

**WO 01/23848 A1**

(57) Abstract: The invention relates to a method of measuring the spectrum of optical radiation and to a spectrometer implementing the method. In the inventive solution an entrance slit (104) of the spectrometer is illuminated with optical radiation. An optical component (106) images the entrance slit (104) to an optical modulator (108) by means of the optical radiation and disperses the optical radiation into a spectrum. The spectrum is modulated by the optical modulator (108). The optical component (106) composes spectral non-dispersive measurement radiation of the spectrum and images the entrance slit (104) included in the measurement radiation to an exit slit (104) which may be the same one as the exit slit (104) or a different one. Measurement radiation is detected from the entrance slit (104) with a detector (110), which converts the measurement radiation into an electrical measurement signal. The measurement signal is demodulated to separate signal components formed by different wavelength bands from one another, and the spectrometer measures at least one wavelength band with at least one signal component which can be used for determining properties of a sample.